



## Modeling and optimization of high voltage power supply for magnetron

By Belhaiba, Abderrahim / Chraygane, Mohammed

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Energy balance of optimized high voltage power supply for magnetron used for the modular microwaves generators | The high voltage power supply for magnetron, used for the modular microwave generators in industrial applications, is a classical design. This system is composed of a single-phase high voltage transformer with shunts supplying a cell, composed of a capacitor and a diode, which doubles the voltage and stabilizes the current. In this case, the leakage fluxes in the magnetic shunts are of the same order in the primary and the secondary fluxes. In this work, a quadruple model of this leakage transformer is developed taking account the saturation phenomena and the stabilization of the magnetron current. From the model of the transformer we will define a strategy of optimization aims at restricting the study of the effect of simultaneous variation of pertinent parameters on the magnetron current. This will lead to find an optimized solution of the transformer. The later, with reduced volume, weight, and therefore cost, will make the power supply more economical. | Format: Paperback | Language/Sprache: english | 76 pp.

DOWNLOAD



READ ONLINE  
[ 6.01 MB ]

### Reviews

*This created ebook is great. it was writtern very properly and useful. Its been printed in an exceedingly easy way in fact it is just right after i finished reading this pdf where basically modified me, alter the way i think.*

*-- Aglae Becker*

*This ebook is definitely worth buying. It is definitely basic but excitement within the fifty percent in the ebook. Its been designed in an extremely straightforward way which is merely following i finished reading this ebook where basically changed me, alter the way in my opinion.*

*-- Ward Morar*